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# MONOGRAPHS ON EDUCATION

IN THE

UNITED STATES

EDITED BY

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## ELEMENTARY EDUCATION

BY

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# ELEMENTARY EDUCATION

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## PART I—GENERAL SURVEY OF THE SCHOOL SYSTEM OF THE UNITED STATES

In all the schools of the United States, public and private, elementary, secondary and higher, there were enrolled in the year 1898 about sixteen and one-half millions (16,687,643) pupils. (See appendix I.) This number includes all who attended at any time in the year for any period, however short. But the actual average attendance for each pupil in the public schools (supported by taxes) did not exceed 98 days, although the average length of the school session was 143.1 days. There were enrolled in the aggregate of public and private schools out of each 100 of the population between the ages of 5 and 18 years, 71 pupils.

Out of the entire number of sixteen and a half millions of pupils deduct the pupils of private and parochial schools of all kinds, elementary, secondary, higher, and schools for art, industry and business, for defective classes and Indians, there remain over 15,000,000 for the public school enrollment, or nearly 91 per cent of the whole. (See appendix I.) In the 28 years since 1870 the attendance on the public schools has increased from less than 7,000,000 to 15,000,000. (Appendix II.) The expenditures have increased somewhat more, namely, from 63,000,000 to 199,000,000 of dollars per annum, an increase from \$1.64 per capita of population to \$2.67. To account for this *pro rata* increase of 61 per cent in the cost of the common schools one must allow for a slight increase in the average length of the school term, and for the increase of enrollment from less than 17 per cent to more than 20 per cent of the population. But the chief items of increase are to be found in teachers' wages for professionally educated teachers, and the cost of

expert supervision. These account for more than two-thirds of the 50 per cent, while the remaining one-sixth (of the whole) is due to better apparatus and more commodious school buildings.

The increase of cities and large villages, owing to the influence of the railroad, has brought nearly one-half the school population within reach of the graded school holding a long session of from 180 to 200 days per year, and taught by professional teachers. (See appendix III.) In 1870 there were for each 10,000 inhabitants 12.75 miles of railway, but in 1890 the number of miles of railway for the same number of inhabitants had risen to 26.12 miles, or more than double the former amount. The effect of this increase of railway is to extend the suburbs of cities and vastly increase the urban population. The rural schools in sparsely settled districts still continue their old practice of holding a winter school with a session of 60 to 80 days only, and taught by the makeshift teacher who works at some other employment for two-thirds of the year. The school year of ideal length should be about 200 days, or 5 days per week for 40 weeks, *i. e.*, nine and one-half months. In the early days of city schools the attempt was made to hold a session of over 46 weeks in length, allowing only six weeks or less for three short vacations. But experience of their advantage to the pupil has led to the increase of the holidays to nearly double the former amount.

Reducing the total average attendance in all the schools, public and private, to years of 200 school days each, it is found that the average total amount of schooling each individual of the population would receive at the rates of attendance and length of session for 1898, is five years, counting both private and public schools.

The average schooling, it appears from the above showing, amounts to enough to secure for each person a little more than one-half of an elementary school course of eight years,—enough to enable the future citizen to read the newspaper, to write fairly well, to count, add, subtract, mul-

tily and divide, and use the simplest fractions. In addition he acquires a little geographical knowledge, so important to enable him to understand the references or allusions in his daily newspaper to places of interest in other parts of the world. But the multiplicity of cheap books and periodicals makes the life of the average citizen a continuation of school to some extent. His knowledge of reading is called into use constantly, and he is obliged to extend gradually his knowledge of the rudiments of geography and history. Even his daily gossip in his family, in the shop, or in the field is to some extent made up of comments on the affairs of the state, the nation, or distant peoples,—China, Japan, Nicaragua, or the Sandwich islands, as the case may be,—and world interests, to a degree, take the place of local scandals in his thoughts. Thus, too, he picks up scraps of science and literature from the newspaper, and everything that he learns becomes at once an instrument for the acquirement of further knowledge. In a nation governed chiefly by public opinion digested and promulgated by the daily newspaper, this knowledge of the rudiments of reading, writing, arithmetic and geography is of vital importance. An illiterate population is impenetrable by newspaper influence, and for it public opinion in any wide sense is impossible; its local prejudices are not purified or eliminated by thought and feeling in reference to objects common to the whole civilized world.

The transformation of an illiterate population into a population that reads the daily newspaper, and perforce thinks on national and international interests, is thus far the greatest good accomplished by the free public school system of the United States. It must be borne in mind that the enrollment in school of one person in every five of the entire population of the country means the same result for the southern states as for the northern, since the states on the Gulf of Mexico enroll nearly 22 per cent of their total population, colored and white, and the south Atlantic 20.70 per cent, while the north Atlantic and the western, mountain and

Pacific divisions enroll only 18 per cent, having a much smaller ratio of children of school age.

In a reading population one section understands the motives of the other, and this prevents political differences from becoming too wide for solution by partisan politics. When one section cannot any longer accredit the other with honest and patriotic motives, war is only a question of time. That this general prevalence of elementary education is accompanied by a comparative neglect of the secondary and higher courses of study is evident from the fact that out of the number of pupils enrolled more than ninety-five in every hundred are pursuing elementary studies; less than four in a hundred are in secondary studies in high schools, academies and other institutions; only one in a hundred (13 in one thousand) is in a college or a school for higher studies.

In considering the reasons for the increase of the length of the term of the elementary school and its adoption of a graded course of study, one comes upon the most important item of improvement that belongs to the recent history of education, namely, the introduction of professionally trained teachers. The first normal school established in the United States recently celebrated its fiftieth anniversary. It was founded at Lexington, Massachusetts, in 1839. The number of public normal schools supported by the state or municipal governments has increased since that year to 167, enrolling 46,245 students, and graduating nearly 8,000 per annum. To this number are to be added 178 private normal schools, with an aggregate of 21,293 students and 2,000 graduates. In 1880 there were 240 normal school students in each million of inhabitants; in 1897 there were 936, or nearly four times as many in each million.

The professionally educated teacher finds his place in the graded schools, above mentioned as established in cities and large villages, and kept in session for the entire scholastic year of 200 days. It is the experience of school superintendents that graduates of normal schools continue to improve in skill and efficiency for many years. The advan-

tage of the professionally educated teacher above others is to be found in the fact that he has been trained to observe methods and devices of instruction. On entering a school taught by another teacher he at once sees, without special effort, the methods of teaching and management, and notes the defects as well as the strong points if there are any. He is constantly increasing his number of successful devices to secure good behavior without harsh measures, and to secure industry and critical attention in study. Every normal school has a thorough course of study in the elementary branches, taking them up in view of the higher branches from which they are derived, and explaining their difficult topics. This kind of work prepares the teacher in advance for the mishaps of the pupil, and arms him with the skill to assist self-activity by teaching the pupil to analyze his problem into its elements. He can divide each step that is too long for the pupil to take, into its component steps, down to any required degree of simplicity. The normal school graduate, too, other things being equal, has a better idea than other teachers of the educational value of a branch of study. He knows what points are essential, and what are accidental and subsidiary. He therefore makes his pupils thoroughly acquainted with those strategical positions, and shows him how to conquer all the rest through these.

As it would appear from the statistics given, the rural districts are precluded by their short school terms from securing professional teachers. The corps of teachers in a highly-favored city will be able to claim a large percentage of its rank and file as graduates of its municipal training schools — perhaps 50 to 60 per cent. But the cities and villages as a whole in their graded schools cannot as yet show an average of more than one teacher in four who has received the diploma of a normal school.

Another important advantage has been named as belonging to the schools of the village or city. They are graded schools, and have a regular course of study, uniformity of text-books, and a proper classification of pupils. In the

small rural schools some 20 to 50 pupils are brought together under one teacher. Their ages vary from 4 years to 20, and their degree of advancement ranges from new beginners in the alphabet up to those who have attended school for 10 or 12 winters, and are now attempting Latin and algebra. It often happens that there is no uniformity of text-books, except perhaps in the spelling-book and reader, each pupil bringing such arithmetic, geography or grammar as his family at home happens to possess. Twenty pupils are classified in three classes in reading, three in spelling, and perhaps as many classes in arithmetic, grammar, geography, and other studies as there are pupils pursuing those branches. The result is from 20 to 40 separate lessons to look after, and perhaps five or 10 minutes to devote to each class exercise. The teacher finds himself limited to examining the pupil on the work done in memorizing the words of the book, or to comparing the answers he has found to the arithmetic problems with those in the printed key, occasionally giving assistance in some difficult problem that has baffled the efforts of the pupil—no probing of the lesson by analytical questions, no restatement of the ideas in the pupil's own words, and no criticism on the data and methods of the text-book.

This was the case in the old-time district school—such as existed in 1790, when 29 out of 30 of the population lived in rural districts; also as late as 1840, when only one in twelve lived in a city. As the railroad has caused villages to grow into cities, so it has virtually moved into the city a vast population living near railway stations in the country by giving them the morning newspaper and rapid transportation. In 1890 one-third of the population were living in cities of not less than 8,000 inhabitants. But the suburban populations made urban by the railroad—as indicated above—would swell the city population to one-half of the whole nation. Hence the great change now taking place in methods of building school houses and in organizing schools.

In the ungraded schools the naturally bright pupils accom-



plished a fair amount of work if they happened to have good text-books. They were able to teach themselves from the books. But the rank and file of the school learned a little reading, writing and arithmetic, and probably studied the same book for several winters, beginning at the first page on the first day of school each year. Those who needed no help from the teacher learned to help themselves and enjoyed a delightful freedom. Those who were slow and dull did not get much aid. Their industry may have been stimulated by fear of the rod, which was often used in cases of real or supposed indolence. Harsh measures may succeed in forcing pupils to do mechanical work, but they cannot secure much development of the power of thought. Hence the resources of the so-called "strict" teacher were to compel the memorizing of the words of the book.

With the growth from the rural to the urban condition of population the method of "individual instruction," as it is called, giving it a fine name, has been supplanted by class instruction, which prevails in village and city schools. The individual did not get much instruction under the old plan, for the simple reason that his teacher had only five or ten minutes to examine him on his daily work. In the properly graded school each teacher has two classes, and hears one recite while the other learns a new lesson. Each class is composed of twenty to thirty pupils of nearly the same qualifications as regards the degree of progress made in their studies. The teacher has thirty minutes for a recitation (or "lesson" as called in England), and can go into the merits of the subject and discuss the real thoughts that it involves. The meaning of the words in the book is probed, and the pupil made to explain it in his own language. But besides this all pupils learn more by a class recitation than by an individual recitation. For in the class each can see ~~the lesson~~ reflected in the minds of his fellow-pupils, and ~~understand~~ his teacher's views much better when drawn out in the form of a running commentary on the mistakes of the duller or more indolent pupils. The dull ones are encour-

aged and awakened to effort by finding themselves able to see the errors and absurdities of fellow-pupils. For no two minds take precisely the same view of a text-book exposition of a topic. One child is impressed by one phase of it, and another by a different phase. In the class recitation each one has his crude and one-sided views corrected more or less by his fellows, some of whom have a better comprehension of this point, and some of that point, in the lesson. He, himself, has some glimpses of the subject that are more adequate than those of his fellows.

The possibilities of a class recitation are, therefore, very great for efficient instruction in the hands of a teacher who understands his business. For he can marshal the crude notions of the members of the class one after another, and turn on them the light of all the critical acumen of the class as a whole, supplemented by his own knowledge and experience. From beginning to end, for thirty minutes, the class recitation is a vigorous training in critical alertness. The pupil afterwards commences the preparation of his next lesson from the book with what are called new "apperceptive" powers, for he finds himself noticing and comprehending many statements and a still greater number of implications of meaning in his lesson that before had not been seen or even suspected. He is armed with a better power of analysis, and can "apperceive," or recognize and identify, more of the items of information, and especially more of the thoughts and reflections, than he was able to see before the discussions that took place in the recitation. He has in a sense gained the points of view of fellow-pupils and teacher, in addition to his own.

It is presupposed that the chief work of the pupil in school is the mastery of text-books containing systematic treatises giving the elements of branches of learning taught in the schools. For in the United States more than in any other country text-book instruction has predominated over oral instruction, its method in this respect being nearly the opposite of the method in vogue in the elementary schools of Germany.

The evil of memorizing words without understanding their meaning or verifying the statements made in the text-book is incident to this method and is perhaps the most widely prevalent defect in teaching to be found in the schools of the United States. It is condemned universally, but, nevertheless, practiced. The oral method of Germany escapes this evil almost entirely, but it encounters another evil. The pupil taught by the oral method exclusively is apt to lack power to master the printed page and get out of it the full meaning; he needs the teacher's aid to explain the technical phrases and careful definitions. The American method of text-book instruction throws the child upon the printed page and holds him responsible for its mastery. Hence even in the worst forms of verbal memorizing there is perforce acquired a familiarity with language as it appears to the eye in printed form which gradually becomes more useful for scholarly purposes than the knowledge of speech addressed to the ear. This is the case in all technical, or scientific language, and in all poetry and literary prose; the new words or new shades of meaning require the mind to pause and reflect. This can be done in reading but not in listening to an oral delivery.

In the United States the citizen must learn to help himself in this matter of gaining information, and for this reason he must use his school time to acquire the art of digging knowledge out of books. Hence we may say that a deep instinct or an unconscious need has forced American schools into an excessive use of the text-book method.

In the hands of a trained teacher the good of the method is obtained and the evil avoided. The pupil is taught to assume a critical attitude towards the statements of the book and to test and verify them, or else disprove them by appeal to other authorities, or to actual experiments.

~~This ideal hovers before all teachers, even the poorest,~~  
but it is realized only by the best class of teachers found in the schools of the United States,—a class that is already large and is constantly increasing, thanks to the analytic

methods taught in the normal schools. Text-book memorizing is giving place to the method of critical investigation.

This review of methods suggests a good definition of school instruction. It is the process of re-enforcing the sense-perception of the individual pupil by adding the experience of the race as preserved in books, and it is more especially the strengthening of his powers of thought and insight by adding to his own reflections the points of view and the critical observations of books interpreted by his teachers and fellow-pupils.

In the graded school the pupil is held responsible for his work in a way that is impossible in the rural school of sparsely-settled districts. Hence the method of investigation, as above described, is found in the city schools rather than in the rural schools. Where each pupil forms a class by himself, there is too little time for the teacher to ascertain the character of the pupil's understanding of his book. Even if he sees that there has been a step missed somewhere by the child in learning his lesson, he cannot take time to determine precisely what it is. Where the ungraded school makes some attempt at classification of pupils it is obliged to unite into one class say of arithmetic, grammar, or geography, pupils of very different degrees of progress. The consequence is that the most advanced pupils have not enough work assigned them, being held back to the standard of the average. They must "mark time" (or go through the motions of walking without advancing a step) while the rest are coming up. The least advanced find the average lesson rather too much for them, and become discouraged after trying in vain to keep step with their better prepared fellow-pupils. This condition of affairs is to be found in many rural districts even of those states where the advantages of classification are seen and appreciated in city schools, and an effort is in progress to extend those advantages to the rural schools. But the remedy has been, in many cases, worse than the disease. For it has resulted that classification gets in the way of self-help which the bright pupil is

capable of, and the best scholars "mark time" listlessly, while the poorest get discouraged, and only the average pupils gain something.

It must be admitted, too, that in many village schools just adopting the system of grading, this evil of holding back the bright pupils and of over-pressure on the dull ones exists, and furnishes just occasion for the criticism which is made against the so-called "machine" character of the American public school. The school that permits such poor classification, or that does not keep up a continual process of readjusting the classification by promoting pupils from lower classes to those above them, certainly has no claim to be ranked with schools organized on a modern ideal.

I have dwelt on this somewhat technical matter because of its importance in understanding the most noteworthy improvements in progress in the schools of the United States. Briefly, the population is rapidly becoming urban, the schools are becoming "graded," the pupils of the lowest year's work placed under one teacher, and those of the next degree of advancement under a second teacher; perhaps from eight to twenty teachers in the same building, thus forming a "union school," as it is called in some sections. Here there is division of labor on the part of teachers, one taking only classes just beginning to learn to read and write, another taking the pupils in a higher grade. The inevitable consequence of such division of labor is increase of skill. The teacher comes to know just what to do in a given case of obstructed progress—just what minute steps of work to introduce—just what thin wedges to lift the pupil over the threshold that holds back the feeble intellect from entering a new and higher degree of human learning.

It will be asked: What proportion of the teachers of cities and villages habitually use this higher method in conducting recitations. According to a careful estimate, at least one-half of them may reasonably claim to have some skill in its use; of the one-half in the elementary schools who use it perhaps two-fifths conduct all their recitations so

as to make the work of their pupils help each individual in correcting defects of observation and critical alertness. Perhaps the other three-fifths use the method in teaching some branches, but cling to the old memoriter system for the rest. It may be claimed for graduates of normal schools that a large majority follow the better method.

The complaint urged against the machine character of the modern school has been mentioned. I suppose that this complaint is made quite as often against good schools as against poor ones. But the critical-probing method of conducting a recitation is certainly not machine-like in its effects. It arouses in the most powerful manner the activity of the pupil to think and observe for himself. Machine-like schools do not follow this critical method, but are content with the memoriter system, that prescribes so many pages of the book to be learned verbally, but does not inquire into the pupil's understanding, or "apperception," as the Herbartians call it. It is admitted that about 50 per cent of the teachers actually teaching in the schools of villages and cities use this poor method. But it is certain that their proportion in the corps of teachers is diminishing, thanks to the two causes already alluded to : first, the multiplication of professional schools for the training of teachers ; and second, the employment of educational experts as supervisors of schools.

The rural schools, which in the United States enroll one-half of the entire number of school children, certainly lack good class teaching, even when they are so fortunate as to obtain professionally educated teachers, and not five per cent of such schools in the land succeed in procuring better services than the "makeshift" teacher can give. The worst that can be said of these poorly taught schools is that the pupils are either left to help themselves to knowledge by reading their books under the plan of individual instruction, or, in the attempt at classification and grading, the average pupils learn something, while the bright pupils become listless and indolent for want of tasks commensurate with their strength and the backward pupils lose their courage for their want of

ability to keep step. Even under these circumstances the great good is accomplished that all the pupils learn the rudiments of reading, writing and arithmetic, and all are made able to become readers of the newspapers, the magazines, and finally of books.

Another phase of the modern school that more than anything else gives it the appearance of a machine, and the American city schools are often condemned for their mechanism, is its discipline, or method of organization and government. In the rural school with twenty-five pupils, more or less, it makes little difference whether pupils come into the school room and go out in military order, so far as the work of the school is concerned. But in the graded school with three hundred to eight hundred pupils order and discipline are necessary down to the last particular, for the safety of the pupils as well as for the accomplishment of the ends for which the school exists. There must be regularity and punctuality, silence and conformity to order, in coming and going. The whole school seems to move like a machine. In the ungraded school a delightful individuality prevails, the pupil helping himself to knowledge by the use of the book, and coming and going pretty much as he pleases, with no subordination to rigid discipline, except perhaps when standing in class for recitation.

Regularity, punctuality, silence, and conformity to order, —military drill,—seem at first to be so much waste of energy,—necessary, it is true, for the large school, but to be subtracted from the amount of force available for study and thought. But the moment the question of moral training comes to be investigated, the superiority of the education given in the large school is manifest. The pupil is taught to be regular and punctual in his attendance on school and in all his movements, not for the sake of the school alone, but for all his relations to his fellow-men. Social combination is made possible by these semi-mechanical virtues. The pupil learns to hold back his animal impulse to chatter or whisper to his fellows and to interrupt their serious

absorption in recitation or study, and by so much self-restraint he begins to form a good habit for life. He learns to respect the serious business of others. By whispering he can waste his own time and also that of others. In moving to and fro by a sort of military concert and precision he acquires the impulse to behave in an orderly manner, to stay in his own place and not get in the way of others. Hence he prepares for concerted action,—another important lesson in citizenship, leaving entirely out of account its military significance.

With the increase of cities and the growth of great industrial combinations this discipline in the virtues that lie at the basis of concerted action is not merely important, but essential. In the railroad system a lack of those semi-mechanical virtues would entirely unfit one for a place as laborer or employee; so, too, in a great mill or a great business house. Precision, accuracy, implicit obedience to the head or directive power, are necessary for the safety of others and for the production of any positive results. The rural school does not fit its pupils for an age of productive industry and emancipation from drudgery by means of machinery. But the city school performs this so well that it reminds some people unpleasantly of a machine.

The ungraded school has been famous for its harsh methods of discipline ever since the time of the flogging schoolmaster Orbilius whom Horace mentions. The rural schoolmaster to this day often prides himself on his ability to “govern” his unruly boys by corporal punishment. They must be respectful to his authority, obedient and studious, or else they are made to suffer bodily pain from the hand of the teacher. But harsh discipline leaves indurations on the soul itself, and is not compatible with a refined type of civilization. The schoolmaster who bullies his pupils into obedience does what he can to nurture them into the same type as himself.

In the matter of school discipline the graded school has an advantage over the school of the rural district. A corps



of teachers can secure good behavior more efficiently than a single teacher. The system, and what is disparaged as its "mechanism," help this result. In many cities of the largest size in the United States, corporal punishment is seldom resorted to, or is even entirely dispensed with. (See appendix V.) The discipline of the school seems to improve after the discontinuance of harsh punishments. The adoption of a plan of building better suited for the purpose of graded schools has had much to do with the disuse of the rod. As long as the children to the number of one or two hundred studied in a large room under the eye of the principal of the school, and were sent out to small rooms to recite to assistant teachers, the order of the school was preserved by corporal punishment. When Boston introduced the new style of school building with the erection of the Quincy school in 1847, giving each class-teacher a room to herself, in which pupils to the number of fifty or so prepared their lessons under the eye of the same teacher that conducted their recitations (*i. e.*, "heard their lessons"), a new era in school discipline began. It is possible to manage a school in such a building with little or no corporal punishment.

The ideal of discipline is to train the pupil into habits of self-government. This is accomplished partly by perfecting the habit of moving in concert with others, and by self-restraint in all actions that interfere with the work of other pupils.

That the public schools of cities have worked great and favorable changes to the advantage of civil order cannot be doubted. They have generally broken up the feuds that used to prevail between the people of different precincts. Learning to live without quarreling with school-fellows is an efficient preparation for an orderly and peaceful life with one's neighbors.

The rural school, with all its shortcomings, was, and is to-day, a great moral force for the sparsely settled regions, bringing together the youth of the scattered families, and forming friendships, cultivating polite behavior, affording to

each an insight into the motives and springs of action of his neighbors, and teaching him how to co-operate with them in securing a common good.

The city school is a stronger moral force than the rural school because of its superior training in the social habits named — regularity, punctuality, orderly concerted action and self-restraint.

Take any country with a school system, and compare the number of illiterate criminals with the total number of illiterate inhabitants, and also the number of criminals able to read and write with the entire reading population, and it will be found that the representation from the illiterate population is many times larger than from an equal number of people who can read and write. In the United States the prevailing ratio is about eight to one — that is to say, the illiterate population sends eight times its quota to jails. In the prisons or penitentiaries it is found that the illiterate stratum of the population is represented by two and a half times its quota. (See part IV of this monograph.) School education is perhaps in this case not a cause so much as an index of orderly tendencies in the family. A wayward tendency will show itself in a dislike of the restraints of school. If, however, the wayward can be brought under the humanizing influences of school, trained in good behavior, which means self-restraint and orderly concerted action, interested in school studies and the pursuit of truth, what can do more to insure a moral life, unless it is religion?

## PART II — EDUCATIONAL ORGANIZATION IN THE UNITED STATES

The European student of education inquiring about schools always asks concerning the laws and regulations issued by the central government at Washington, taking for granted that things of such interest as education are regulated by the nation, as in Europe.

The central government of the United States, however, has never attempted any control over education within the several states. It is further than ever from any such action

at the present time. The idea of local self-government is that each individual shall manage for himself such matters as concern him alone; that where two or more persons are concerned the smallest political subdivision shall have jurisdiction and legislative powers; where the well-being of several towns is concerned the county or the state may determine the action taken. But where the interests of more than one state are concerned, the nation has ultimate control.

While the general government has not interfered to establish schools in the states, it has often aided them by donations of land, and in some cases by money, as in the acts of 1887 and 1890, which appropriate annual sums in aid of agricultural experiment stations and increase the endowment of agricultural colleges, which were formerly established in 1862 by generous grants of land.

The total amount of land donated to the several states for educational purposes since 1785 to the present have been as follows:

1. For public or common schools:	Acres
Every 16th section of public land in states admitted prior to 1848 and the 16th and 36th sections since (Utah, however, having four sections).....	67,893,919
2. For seminaries or universities:	
Two townships in each state or territory containing public land.....	1,165,520
3. For agricultural and mechanical colleges:	
30,000 acres for each member of congress to which the state is entitled.....	9,600,000
Total number of acres.....	<u><u>78,659,439</u></u>

At the rate of one dollar and a quarter an acre (the traditional price asked by the government for its lands) this amounts to about one hundred millions of dollars.

Besides this a perpetual endowment by act of 1887 is made of \$15,000 per annum for each agricultural experiment station connected with the state agricultural college, and \$25,000 perpetual additional endowment by act of 1890 for

each of the colleges themselves — this is equivalent to a capitalized fund of one million dollars at four per cent for each state and territory, or in the aggregate about fifty millions more.

The general government supports the military school at West Point, established in 1802, to which each congressional district, territory (and the District of Columbia) is entitled to send one cadet, the president appointing ten additional cadets at large. Each cadet receives \$540 a year to pay his expenses. (The course of study is four years. The number of graduates between 1802 and 1876 was 2,640, about fifty per cent of all admitted.)

The United States naval academy at Annapolis was established in 1845. Its course of study in 1873 was extended to six years. Cadets are appointed in the same manner as at West Point.

The general government provides for the education of the children of uncivilized Indians and for all the children in Alaska. There have been, besides the general grants referred to, special grants of land for educational purposes such as the "swamp lands" (Acts of 1849, 1850, 1860), by which 62,428,419 acres were given to 14 states (Alabama, Arkansas, California, Florida, Illinois, Indiana, Iowa, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Ohio and Wisconsin) and by some of these appropriated to education.

By the act of 1841 a half million of acres was given to each of sixteen states (including all above named except Indiana and Ohio, and besides these Kansas, Nebraska, Nevada and Oregon). This gives an aggregate of 8,000,000 of acres, the proceeds of most of which was devoted to education. The surplus funds of the United States treasury were in 1837 loaned to the older states for educational purposes to the amount of \$15,000,000 and this fund constitutes a portion of the school fund in many of the states.

The aggregate value of lands and money given for education in the several states is therefore nearly three hundred millions of dollars.

In 1867 congress established a national bureau of education "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several states and territories, and of diffusing such information respecting the organization and management of school systems and methods of teaching as shall aid the people of the United States in the establishment and maintainance of efficient school systems, and otherwise promote the cause of education throughout the country." This bureau up to 1898 has published 350 separate volumes and pamphlets including 30 annual reports ranging from 800 to 2,300 pages each. The policy of the national government is to aid education but not in anywise to assume its control.

The several states repeat in the general form of their state constitutions the national constitution and delegate to the subdivisions—counties or townships—the management of education. (See appendix VIII, The local unit of school organization.) But each state possesses centralized power and can exercise it when the public opinion of its population demands such exercise.

**Compulsory attendance** — Even in colonial times as far back as 1642 a compulsory law was enacted in Massachusetts inflicting penalties on parents for the neglect of education. In the revival of educational interest led by Horace Mann in the years after 1837, it was felt that there must be a state law, with specific provisions and penalties and this feeling took definite shape and produced legislative action. A truant law was passed in 1850 and a compulsory law in 1852, requiring a minimum of 12 weeks attendance on school each year for children between the ages of eight and fourteen under penalty of twenty dollars.

In the Connecticut colony in 1650 the Massachusetts law of 1642 was adopted. Amendments were adopted in 1805 and 1821. By a law of 1813 manufacturing establishments were compelled to see that "the children in their employ were taught to read, write and cipher [arithmetical calculation], and that attention was paid to their morals." In

1842 a penalty was attached to a similar law which forbade "the employment of children under the age of 15 years unless they had been instructed at school at least three months of the 12 preceding."

The efficiency of these early laws has been denied because cases of prosecution have not been recorded. But a law-abiding people does not wait until prosecuted before obeying the law.

The existence of a reasonable law is sufficient to secure its general obedience in most parts of the United States. But in the absence of any law on the subject the parents yield to their cupidity and do not send their children to school. The efficiency of a law is to be found in its results and if twenty parents in a district send their children to school in obedience to the law and would not otherwise have sent them, it follows that the law is very useful though the twenty-first parent is obdurate and refuses to send his children and yet is not prosecuted for it.

This explanation of the working of one compulsory law will throw light on the working of compulsory laws in the twenty-seven states and territories that have passed them. There are exceptional localities in each state where an obnoxious law is openly and frequently violated, but the law is obeyed in all but a few places. In each locality, too, there are individuals who are disposed to violate the law and succeed in doing so, while all the citizens except these few obey the law because they have a law-abiding disposition. Abolish the law and the number who neglect the education of their children will increase by a large per cent. More and more attention has been given in later years to drafting compulsory laws with provisions that are sure to be efficient. The advocates of these new laws are apt in their pleas for more stringent laws to do injustice to the old laws. The following paragraphs show what states have adopted compulsory laws and the dates of adoption (the earlier dates in Connecticut and Massachusetts being unnoticed):

**Statistics of compulsory attendance**—Thirty states, one

territory and the District of Columbia have laws making education compulsory, generally at a public or approved private school. Sixteen states and one territory do not make education compulsory, although all of these have fully organized systems of schools free to every child of school age of whatever condition.

The most general period of required attendance at school is from eight to fourteen years of age, as is the case in Vermont, District of Columbia, West Virginia, Indiana, Michigan, North Dakota, South Dakota, Nebraska, Kansas, Montana, Colorado, Utah, Nevada, Idaho, Oregon and California. It begins likewise at eight, but is extended to 15 in Maine and Washington, and is from eight to 16 in New Hampshire, Connecticut, New York, Pennsylvania, Minnesota and New Mexico.

The child is required to begin attendance at the earlier age of seven, and continue to 12 in New Jersey, to 13 in Wisconsin, to 14 in Massachusetts, Kentucky and Illinois; to 15 in Rhode Island, and to 16 in Wyoming.

This is a general statement of age limits; the required time period is in some states shortened in the case of children employed to labor, or extended in the case of those not so employed, or growing up in idleness, or illiterate.

In Massachusetts and Connecticut the child is required to attend the full time that the schools are in session; in New York and Rhode Island, also, the full term, with certain exceptions in favor of children employed to work. In Pennsylvania the attendance is required for 70 per cent of the full term; in California for 66 2-3 per cent; for 20 weeks annually in Vermont, New Jersey, Ohio and Utah; 16 weeks annually in Maine, West Virginia, Illinois, Michigan and Nevada; 12 weeks annually in New Hampshire, District of Columbia, Indiana, Wisconsin, Kansas, North Dakota, South Dakota, Nebraska, New Mexico, Idaho, Washington, Oregon; and eight weeks annually in Kentucky.

In the following states habitual truants are sent to some special institution (truant or industrial school, reformatory,

parental home, etc.): Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Indiana, Minnesota and Michigan.

Massachusetts requires counties, and New York requires cities to maintain truant schools, or provide for their truants in the truant schools of neighboring localities. Illinois requires cities of over 100,000 inhabitants to maintain truant schools. In Rhode Island towns and cities must provide suitable places for the confinement and instruction of habitual truants.

Clothing is furnished in case of poverty to enable children to attend school in Vermont, Indiana and Colorado.

Laws absolutely prohibiting the employment of children under a specified minimum age in mercantile or manufacturing establishments are in force in New Hampshire (under 10 years), Rhode Island (under 12), and Massachusetts and Connecticut (under 14). These states, together with Vermont, New York, New Jersey, Ohio, Illinois, Michigan, North and South Dakota, have laws permitting the employment of children of a certain age only while the schools are not in session, or provided they have already attended school a given number of weeks within the year.

**Statistics of supervision** — There are county superintendents of schools in all those states where the county is a political unit for the administration of civil affairs other than courts of law. About thirty-five states have this form of organization. But in the six New England states and in Michigan the only supervision is that of the township, and the counties in those states are units almost solely for the administration of justice through county courts. In Arkansas, Texas and North Carolina supervision is only that of the subdivisions of townships described as districts. Louisiana, Mississippi and West Virginia have a modified township supervision. The county superintendents are elected by the people in only 13 states. In the rest they are appointed by some state or county officers, or chosen by the combined vote of the school boards. (See appendix VIII for an explanation of the local unit of school organization.)



Each state has a superintendent of public instruction. He has this title in 29 states; in the remaining states other designations, as "superintendent of common schools," "of free schools," or "of public schools," "of education" or "commissioner of public schools," are used; he is called "secretary of state board of education" in Massachusetts and Connecticut.

Eight hundred and thirty-six (836) cities have superintendents of their public schools.

**School boards** — In cities the local boards which have the management of the schools are generally termed "boards of education;" in towns and districts the designations most generally used are "school directors" and "school trustees."

They are termed "school directors" in Arkansas, Illinois, Iowa, Louisiana, Pennsylvania, Tennessee and Washington; "school trustees" in Indiana, Kentucky, New Jersey, New York, Mississippi, Nevada, South Carolina and Texas; "school boards" in Michigan, Wisconsin, Nebraska and New Hampshire; "school committees" in Massachusetts and Rhode Island; "school visitors" in Connecticut; "superintending school committees" in Maine; "boards of education" in Ohio; and "prudential committees" in Vermont.

These boards are similar in their constitution, powers and duties, and are generally chosen by the voters at elections. They are corporate bodies and can make contracts, acquire, hold and dispose of property.

They employ teachers (and superintendents when such are deemed necessary) and fix their salaries. They make the rules and regulations for the government of the schools and fix the course of study and the list of text-books to be used. They hold meetings monthly or oftener.

**Women in school administration** — There are at present (1899) two women holding the position of state superintendent of schools, 18 that of city superintendent, and 256 that of county superintendent. The last named are divided between California, Colorado, Idaho, Illinois, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Montana,

Nebraska, New York, North Dakota, Oklahoma, Pennsylvania, South Dakota, Tennessee, Utah, Vermont, Washington, Wisconsin and Wyoming. In all these states, women hold minor school offices also. Ohio, Maine, New Hampshire, Massachusetts, Rhode Island and Connecticut have no officers corresponding to county superintendents, but in all those states there are women who are members of county examining boards, township superintendents and the like. They may be district trustees or members of local school boards in still other states, as in New Jersey. Women may hold any school office in Colorado, Idaho, Illinois, Indiana, Louisiana, Oregon, South Dakota, Utah, Vermont, Wyoming, and any office of school management in Minnesota. One of the members of the Iowa educational board of examiners must be a woman.

Women have like suffrage, in all particulars, with men in Colorado, Idaho, Utah and Wyoming. With certain limitations specified, in some of the states they may vote at school elections in Arizona, Connecticut, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oregon, South Dakota, Vermont, Washington and Wisconsin. The limitations, when there are any, usually restrict the suffrage of women to widows with children to educate, guardians and taxpayers, or to certain kinds of elections.

**Salaries of teachers**—The expenditure for salaries in the public schools, teachers and superintendents both included, was \$123,809,412, in 1897-98, or 63.8 per cent of the total expenditure for school purposes. The highest average salaries are found in the western division, among the Pacific states and territories, the average per month for men being \$58.59, and for women \$50.92, in that section of the union. The lowest average salaries and the least variance between the averages for men and women are found in the South Atlantic section. The averages are, for men \$31.21, and for women \$31.45.

The length of the school year must be considered in determining the annual salary. This period averages for the whole country 143.1 days, or about seven months of 20 days each, and ranges from 98.6 days in the south central division to 174.5 days in the North Atlantic. (See appendix VI, Teachers' pensions, etc.)

**Co-education of the sexes** — In both the central and the western divisions the education of boys and girls in the same schools is common and exceptions rare in the public schools. In the North and South Atlantic divisions many of the older cities continue to educate the girls in separate schools. In newly-added suburban schools, however, co-education is the rule (as in Boston, for example). In the rural districts of the Atlantic divisions north and south, co-education has always been the custom. Considering the whole country, it may be said that co-education, or the education of boys and girls in the same classes, is the general practice in the elementary schools of the United States. The cities that present exceptions to this rule are fewer, apparently, than 6 per cent of the total number. In the majority of these cities the separation of boys and girls has arisen from the position or original arrangement of buildings, and is likely to be discontinued under more favorable conditions. Of the 50 principal cities enumerated by the census of 1890, 4, namely, Philadelphia (Pennsylvania); Newark (New Jersey); Providence (Rhode Island); and Atlanta (Georgia) — report separation of the sexes in the high schools only; 2 cities of this class, San Francisco (California), and Wilmington (Delaware), reported in 1892, separation in all grades above the primary. In 6 cities, New York and Brooklyn (New York); Boston (Massachusetts); Baltimore (Maryland); Washington (District of Columbia), and Louisville (Kentucky) — both separate and mixed classes are found in all grades. Five cities of the second class, having a population of 8,000 or more, report separation of the sexes in the high schools, and 10 cities of the same group separate classes in other grades. Of cities whose population

is less than 8,000, nine report separate classes for boys and girls in some grades.

Co-education is the policy in about two-thirds of the total number of private schools reporting to this bureau, and in 65 per cent of the colleges and universities.

**Sectarian division of school funds** — In connection with this matter of state compulsory laws against neglect of schools it is well to mention the provisions made in the several states prohibiting appropriations of money to aid denominational schools.

There are forty states with constitutional provisions forbidding all, or at least sectarian diversion of the money raised for the support of education.

1. *Constitutions which prohibit sectarian appropriations* — California,<sup>1</sup> Colorado, Florida, Georgia, Idaho, Illinois, Indiana,<sup>2</sup> Louisiana, Michigan, Minnesota, Mississippi,<sup>3</sup> Missouri, Montana, New Hampshire, North Dakota, Oregon,<sup>2</sup> South Dakota, Texas, Washington, Wisconsin,<sup>2</sup> Wyoming, — 21 states.

2. *Constitutions which do not prohibit sectarian appropriations* — Alabama,<sup>4</sup> Arkansas,<sup>4</sup> Connecticut, Delaware, Iowa,<sup>4</sup> Kansas, Kentucky,<sup>5</sup> Maine, Maryland, Massachusetts, Nebraska,<sup>6</sup> Nevada,<sup>6</sup> New Jersey,<sup>7</sup> New York, North Carolina, Ohio, Pennsylvania,<sup>4</sup> Rhode Island, South Carolina,<sup>6</sup> Tennessee, Vermont, Virginia, West Virginia, — 23 states.

3. *Constitutions which prohibit any diversion of the school fund* — Alabama, Arkansas, California, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New

<sup>1</sup> Can make per capita grants to institutions.

<sup>2</sup> Covers only religious and theological institutions.

<sup>3</sup> Prohibits any devise, legacy, or gift by last will and testament, to religious or ecclesiastical corporations or societies.

<sup>4</sup> Sectarian appropriations can be made by two-thirds vote of all the members of both houses of the legislature.

<sup>5</sup> Has a revised constitution pending popular adoption.

<sup>6</sup> Prohibits sectarian instruction in public schools.

<sup>7</sup> Prohibits appropriations to societies, associations or corporations.

Jersey, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Washington, West Virginia, Virginia, Wisconsin,— 36 states.

**The local unit of school organization** — The state exercises remote authority over all public schools in its borders. The county in most states has a closer supervision of all schools in its limits, but has very little to do with schools in New England. In certain states it becomes the unit for the entire local administration of public schools. The town or township takes more or less of the local functions in other states, and the district becomes a local unit for variable functions in yet others. In 35 counties of Texas there is a community system. Counties generally receive, hold and disburse moneys for townships and districts formed by subdivision of counties. Towns or townships generally hold the same relation to districts formed by division of towns or townships. In a few states districts have their own tax collectors and treasurers.

The summarized statement below shows the principal agency through which local support and control of schools is exercised, special laws excepted, under which cities, towns and independent districts exist.

*County* — Alabama, with either town or township ; Florida, with provision for districts of limited power ; Georgia ; Louisiana, recognizing congressional townships in accounts of sixteenth section land funds ; Maryland ; Mississippi, with provision for separate districts ; North Carolina, with districts capable of holding real estate ; Tennessee, with some local functions in districts and only supervisory powers in sub-districts ; Utah, with provision for division.

*Town or township* — Alabama, the congressional township<sup>1</sup> for administrative convenience, its officers appointed and its accounts kept by county officers ; Connecticut, the town may abolish districts ; Illinois, township based on congressional township or district, optional ; Indiana, New Jersey, Ohio

<sup>1</sup> The expression "congressional township" refers to the division established in new territories by the government survey. Lines of latitude and longitude cross one another six statute miles apart, making townships exactly six miles square.

and Pennsylvania, each township, incorporated town or city (or borough in Pennsylvania), a district corporation for school purposes; Iowa, township based on congressional township, with sub-districts for supervisory convenience and independent districts, both in use; Maine, Massachusetts; Minnesota, township may be a district as a part of a county; New Hampshire; New York, recognized for certain land funds, but districts generally; North Dakota, based on congressional township; Rhode Island, may create or abolish districts; South Dakota, based on congressional township; Vermont, Wisconsin, optional in formation of districts.

*District* — Arkansas, Arizona, California, Colorado; Connecticut, where not abolished by the town; Delaware, Florida, Idaho; Illinois, optional with townships; Iowa, independent districts as well as townships; Kansas, Minnesota, Missouri, districts may be less than townships; Kentucky, Michigan, Mississippi, optional; Montana, Nebraska; Nevada, each village, town or city is a district; New Mexico; New York, commissioner's district, a county or part of a county, has supervisory authority, school districts are parts of commissioners' districts, towns recognized for certain land funds; North Carolina, with limited powers as stated under county; Oklahoma, Oregon, South Carolina; Tennessee, with limited powers as stated under county; Texas, but cities may acquire exclusive control of their schools, towns and villages may be incorporated for school purposes only, in 35 community counties families associate from year to year to support schools and draw their share of public money; Utah, permissible as stated under county; Virginia, West Virginia, corresponding geographically to magisterial districts; Washington, each city or town (incorporated); Wisconsin, optional, see town or township; Wyoming.

### PART III — THE ELEMENTARY COURSE OF STUDY

A committee appointed by the National Educational Association in 1894 prepared a course of study for the eight years of the elementary schools recommending two innovations,

namely, the introduction of Latin, French or German in the eighth year and algebra in the seventh and eighth years. The following presents the course as given in the report of the committee together with a conspectus in the nature of a yearly programme.

#### ELEMENTARY SCHOOL COURSE

Reading. Eight years, with daily lessons.

Penmanship. Six years, ten lessons per week for first two years, five for third and fourth, and three for fifth and sixth.

Spelling Lists. Fourth, fifth and sixth years, four lessons per week.

Grammar. Oral, with composition or dictation, first year to middle of fifth year, text-book from middle of fifth year to close of seventh year, five lessons per week. (Composition writing should be included under this head. But the written examinations on the several branches should be counted under the head of composition work.)

Latin or French or German. Eighth year, five lessons per week.

Arithmetic. Oral first and second year, text-book third to sixth year, five lessons per week.

Algebra. Seventh and eighth years, five lessons per week.

Geography. Oral lessons second year to middle of third year, text-book from middle of third year, five lessons weekly to seventh year, and three lessons to close of eighth.

Natural Science and Hygiene. Oral lessons, 60 minutes per week, eight years.

History of United States. Five hours per week seventh year and first half of eighth year.

Constitution of United States. Last half of the eighth year.

General History and Biography. Oral lessons, 60 minutes a week, eight years.

Physical Culture. 60 minutes a week, eight years.

Vocal Music. 60 minutes a week, eight years.

Drawing. 60 minutes a week, eight years.

Manual Training or Sewing and Cooking. One-half day each week in seventh and eighth years.

## GENERAL PROGRAM

BRANCHES	1st year	2d year	3d year	4th year	5th year	6th year	7th year	8th year
Reading.....	10 lessons a week		5 lessons a week					
Writing.....	10 lessons a week		5 lessons a week		3 lessons a week			
Spelling lists.....			4 lessons a week					
English grammar.....	Oral, with composition lessons					5 lessons a week with text-book		
Latin, French, or German.								5 lessons
Arithmetic .....	Oral, 60 minutes a week		5 lessons a week with text-book					
Algebra.....							5 lessons a week	
Geography.....		Oral, 60 minutes a week	5 lessons a week with text-book				3 lessons a week	
Natural Science+Hygiene	Sixty minutes a week							
United States History ....							5 lessons a week	
United States Constitution								5 ls
General History.....	Oral, sixty minutes a week							
Physical Culture.....	Sixty minutes a week							
Vocal Music.....	Sixty minutes a week divided into 4 lessons							
Drawing.....	Sixty minutes a week							
Manual Training or Sewing+Cookery .....							One-half day each week	
Number of Lessons.....	20+7 daily exer.	20+7 daily exer.	20+5 daily exer.	24+5 daily exer.	27+5 daily exer.	27+5 daily exer.	23+6 daily exer.	23+6 daily exer.
Total Hours of Recitations	12	12	11 2-3	13	16 1-4	16 1-4	17 1-2	17 1-2
Length of Recitations....	15 min	15 min	20 min	20 min	25 min	25 min	30 min	30 min



**The subjects actually taught in the elementary schools** — In the report of the National bureau of education for 1888–89 (pp. 373–410), from a selected list of 82 of the most important cities of the nation, statistics are given showing the amount of time consumed in the entire eight years of the elementary course on each of the branches constituting the curriculum. The returns included 26 branches, one of which was spelling. The total number of hours of instruction in the entire eight years varied in the different cities from 3,000 to 9,000, with a general average of about 7,000 hours, which would mean that each pupil used about four and a half hours per day for 200 days in actual study and in recitation or class exercises. The amount of time reported as used by pupils in studying and reciting spelling during the eight years varied from about 300 to 1,200 hours, with an average of 516. This means that from 37 to 150 hours a year, with average of 77 hours a year for eight years, was devoted to spelling. The English speaking child who learns to read has to use an inordinate amount of time in memorizing the difficult combinations of letters used to represent English words.

This report of the bureau of education gives the time devoted to reading in 82 cities as ranging from about 600 to about 2,000 hours, and the average as 1,188 hours. Thus from 75 to 250 hours a year, with an average of 150, are spent in learning to read.

Geography is reported as using from 200 to 1,000 hours, with an average of about 500, or 25 to 125 hours per year, the average being rather more than 60 hours a year. This, we see, is less than the time devoted to spelling.

Arithmetic, as shown by the report, still receives more attention than any other branch. The amount of time used varies from 600 to 2,240 hours, with an average of about 1,190 hours—that is to say, from 75 to 280 hours per year—an average of 150 hours a year. No other nation gives so much time to arithmetic. The question naturally arises whether corresponding results are obtained in the mastery

of this difficult branch, and whether so much arithmetic strengthens or weakens the national character on the whole.

Turning from arithmetic to grammar, we find a great falling off in the amount of attention it receives compared with the time assigned to it a few years ago. The 82 cities report a very large substitution of "language lessons" for technical grammar. Grammar proper gets from 65 to 680 hours of the course, with an average of about 300 hours. This would allow from 8 to 80 hours, with an average of 38 hours per year, if distributed over the entire course. But it is evident that grammar proper is, as a study, not profitable to take up until the seventh year of the course of study. But the language lessons, which are practiced in all the grades above the lowest two, more than compensate for any curtailment in technical grammar and "parsing."

Mathematics gives an insight into the nature of matter and motion, for their form is quantitative. But the form of mind on the other hand is shown in consciousness—a subject and object. The mind is always engaged in predicating something of something, always modifying something by something, and the categories of this mental operation are the categories of grammar, and appear as parts of speech. The child by the study of grammar gets some practice in the use of these categories and acquires unconsciously a power of analysis of thoughts, motives and feelings, which is of the most practical character.

History, which gives an insight into human nature as it is manifested in social wholes—tribes, nations and peoples—is a study of the elementary school, usually placed in the last year or two of the course, with a text-book on the history of the United States. The returns from the 82 cities show that this study everywhere holds its place, and that it receives more than one-half as much time as grammar. Considering the fact that grammar is begun a year earlier, this is better than we should expect. With history there is usually joined the study of the constitution of the United States for one-quarter of the year. Besides this, some schools have

taken up a special text-book devoted to civics, or the duties of citizens. History ranges from 78 to 460 hours, with an average of about 150.

General history has not been introduced into elementary schools, except in a few cases by oral lessons. Oral lessons on physiology, morals and manners, and natural science have been very generally introduced. The amount of time assigned in 66 cities to physiology averages 169 hours; to a course of lessons in morals and manners in 27 cities 167 hours; to natural science on an average in the 39 cities that give a systematic course of lessons, 176 hours.

Singing is quite general in all the schools, and instruction in vocal music is provided for in many cities. Lessons in cookery are reported in New Haven (80 hours); and Washington, D. C. (114 hours). It is also taught in Boston, and many other cities not reporting it in the list of 82.

Physical culture is very generally taught. Of the 82 cities, 63 report it as receiving on an average 249 hours a year.

**Manual training** — Manual training is by no means a novelty in American schools. Thomas Jefferson recommended it for the students of the University of Virginia, and Benjamin Franklin included it in his plan for an academy in Philadelphia. An active propaganda was carried on in behalf of manual labor in educational institutions for many years, beginning about 1830, and some of our foremost institutions had their origin under its influence. But what is now known as "manual training" is traced to an exhibit of a Russian institution at the centennial exposition in 1876. The value of the system of hand training there suggested was recognized by such men as John D. Runkle and C. M. Woodward, who became advocates of the new idea and introduced it into the institutions under their charge. Strong opposition was met among schoolmen for a time, but manual training has steadily grown in popularity, and with its growth it has constantly improved in matter and method, and consequently in usefulness. In 1898 manual training was an essential feature in the public school course of 149

cities. In 359 institutions other than city schools there is training which partakes more or less of the nature of manual training, and which belongs in a general way to the same movement. These institutions embrace almost every class known to American education, and the manual features vary from the purely educational manual training of the Teachers college in New York city to the specific trade instruction of the apprentice schools.

In many cases the legislatures have taken cognizance of the movement. Massachusetts requires every city of 20,000 inhabitants to maintain manual training courses in both elementary and high schools. Maine authorizes any city or town to provide instruction in industrial or mechanical drawing to pupils over 15 years of age; industrial training is authorized by general laws in Connecticut, Illinois, Indiana (in cities of over 100,000 population), Maryland, New Jersey, New York, Pennsylvania, Utah, Wisconsin and Wyoming. Congressional appropriations are regularly made for manual training in the District of Columbia; Georgia authorizes county manual labor schools, and in Washington manual training must be taught in each school under the control of the State normal school.

**Kindergartens** — Kindergartens are authorized by general law in Arizona, California, Colorado, Connecticut, Illinois, Indiana, Iowa, Michigan, New York, Ohio, Oregon, Pennsylvania, Vermont and Wisconsin.

Cities also establish kindergartens through powers inherent in their charters. In 1897-98 there were public kindergartens in 189 of the 626 cities of 8,000 population and over. In these 189 cities there were 1,365 separate kindergartens supported by public funds. The number of kindergarten teachers employed was 2,532, and under their care were 95,867 children, 46,577 boys and 49,290 girls.

Information was obtained concerning 2,998 private kindergartens in 1897-98 and it is probable that at least 500 others were in existence. The 2,998 private kindergartens had 6,405 teachers and 93,737 pupils. It will be seen that the

total number of kindergartens, public and private, was 4,363, with 8,937 teachers and 189,604 pupils. The actual number of pupils enrolled in kindergartens in the United States in 1897-98 must have exceeded 200,000.

PART IV — THE PLACE OF POPULAR EDUCATION IN THE IDEALS  
OF THE AMERICAN PEOPLE

Education in the United States is regarded as something organic—something belonging essentially to our political and social structure. Daniel Webster announced, in his clear and incisive manner, this necessity that appertains to the American form of government. He said: "On the diffusion of education among the people rests the preservation and perpetuation of our free institutions. I apprehend no danger to our country from a foreign foe. \* \* \* Our destruction, should it come at all, will be from another quarter. From the inattention of the people to the concerns of the government, from their carelessness and negligence, I confess I do apprehend some danger. I fear that they may place too implicit confidence in their public servants, and fail properly to scrutinize their conduct; that in this way they may be the dupes of designing men and become the instruments of their undoing. Make them intelligent and they will be vigilant; give them the means of detecting the wrong and they will apply the remedy."

We are making the experiment of self-government—a government of the people by the people—and it has seemed a logical conclusion to all nations of all times that the rulers of the people should have the best education attainable. Then, of course, it follows that the entire people of a democracy should be educated for they are the rulers.

Quoting again from Webster's Plymouth oration in 1822: "By general instruction we seek as far as possible to purify the whole atmosphere, to keep good sentiments uppermost, ~~and to turn the strong current of feeling and opinion, as well as the censures of the law and the denunciations of religion, against immorality and crime.~~"

This necessity for education has been felt in all parts of the nation, and the whole subject is reasoned out in many a school report published by city or state. By education we add to the child's experience the experience of the human race. His own experience is necessarily one-sided and shallow; that of the race is thousands of years deep, and it is rounded to fullness. Such deep and rounded experience is what we call wisdom. To prevent the child from making costly mistakes we give him the benefit of seeing the lives of others. The successes and failures of one's fellow-men instruct each of us far more than our own experiments.

The school attempts to give this wisdom in a systematic manner. It uses the essential means for its work in the shape of text-books, in which the experience of the race is digested and stated in a clear and summary manner, in its several departments, so that a child may understand it. He has a teacher to direct his studies and instruct him in the proper methods of getting out of books the wisdom recorded in them. He is taught first in the primary school how to spell out the words and how to write them himself. Above all, he is taught to understand the meaning of the words. All first use of words reaches only a few of their many significations; each word has many meanings and uses, but the child gets at only one meaning, and that the simplest and vaguest, when he begins. His school work is to train him into accuracy and precision in the interpretation of language. He learns gradually to fill each word of the printed page with its proper meaning. He learns to criticise the statements he reads, and to test them in his own experience and by comparison with other records of experience.

In other words, the child at school is set to work to enlarge his own puny life by the addition of the best results of other lives. There is no other process so well adapted to insure a growth in self-respect as the mastery of the thought of the thinkers who have stored and systematized the experience of mankind.

This is the clue to the hopes founded on education. The

patriotic citizen sees that a government managed by illiterate people is a government of one-sided and shallow experience, and that a government by the educated classes insures the benefits of a much wider knowledge of the wise ways of doing things.

The work of the school produces self-respect, because the pupil makes himself the measure of his fellows and grows to be equal to them spiritually by the mastery of their wisdom. Self-respect is the root of the virtues and the active cause of a career of growth in power to know and power to do. Webster called the free public school "a wise and liberal system of police, by which property and the peace of society are secured." He explained the effect of the school as exciting "a feeling of responsibility and a sense of character."

This, he saw, is the legitimate effect; for, as the school causes its pupils to put on the forms of thought given them by the teacher and by the books they use — causes them to control their personal impulses, and to act according to rules and regulations — causes them to behave so as to combine with others and get help from all while they in turn give help; as the school causes the pupil to put off his selfish promptings, and to prefer the forms of action based on a consideration of the interests of others — it is seen that the entire discipline of the school is ethical. Each youth educated in the school has been submitted to a training in the habit of self-control and of obedience to social order. He has become to some extent conscious of two selves; the one his immediate animal impulse, and the second his moral sense of conformity to the order necessary for the harmonious action of all.

The statistics of crime confirm the anticipations of the public in regard to the good effects of education. The jails of the country show pretty generally the ratio of eight to one as the quotas of delinquents furnished from a given ~~number of illiterates~~ as compared with an equal number of ~~those who can read and write~~. Out of 10,000 illiterates there will be eight times as many criminals as out of 10,000

who can read and write. In a state like Michigan, for example, where less than five per cent of the people are illiterate, there are 30 per cent of the criminals in jail who are illiterate. The 95 per cent who are educated to read and write furnish the remaining 70 per cent.

In comparing fractions, it is necessary to consider the denominators as well as the numerators. Comparing only the numerators, we should say education produces more crime than illiteracy; for here are only 30 per cent of those criminals from the illiterate class, but 70 per cent are from those who can read and write. On the other hand, taking the denominators also into consideration, we say: But there are less than five per cent illiterates and more than 95 of educated persons in the entire adult population. Hence the true ratio is found, by combining the two fractions, to be one-eighth, or one to eight for the respective quotas furnished. ( $\frac{30}{5} : \frac{70}{95} :: 8 : 1$ ).

The penitentiaries, or state prisons, contain the selected criminals who have made more serious attacks on person and property and on the majesty of the law than those left in the jails. These, therefore, come to a larger extent from the 70 per cent of arrests which are from the educated class; and it is found, by comparing the returns of the 20 odd states that keep records of illiteracy, that the illiterates furnish from two to four times their quota for the prisons, while they furnish eight times their quota for the jails and houses of correction.

But it is found on investigation that the criminals who can read and write are mostly from the ranks bordering on illiteracy. They may be described as *barely* able to read and write, but without training in the use of those arts for acquainting themselves with the experience and wisdom of their fellow-men.<sup>1</sup>

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<sup>1</sup> A point is made that those states which have the completest systems of education have the most criminals in their jails and prisons. This is true, but its significance is not read aright until one sees by an analysis of the causes of arrest that it is not a real increase of crime, but an increase of zeal on the part of the community to abolish the seeds of crimes, to repress the vices that lead to crime.



It is against all reason and all experience that the school whose two functions are to secure good behavior and an intelligent acquaintance with the lessons of human experience, should not do what Webster said, namely, "Prevent in some measure the extension of the penal code, by inspiring a salutary and conservative principle of virtue and of knowledge in an early age."

Thus the political problem, which proposes to secure the general welfare by intrusting the management of the government to representatives chosen by all the people, finds its solution in the establishment of schools for the people.

#### PART V — HISTORICAL BEGINNINGS OF SCHOOLS IN THE UNITED STATES

All who become interested in the system of education prevailing in the United States and see the direct bearing it has on the realization of the ideal of self-government, feel an interest in the question of its origin. Anything is best understood when seen in the perspective of its history. We see not only what is present before us but its long trend hitherward.

The school is the auxiliary institution founded for the purpose of reinforcing the education of the four fundamental institutions of civilization. These are the family, civil society (devoted to providing for the wants of food, clothing, and shelter), the state, the church. The characteristic of the school is that it deals with the means necessary for the acquirement, preservation, and communication of intelligence. The mastery of letters and of mathematical symbols; of the technical terms used in geography and grammar and the sciences; the conventional meaning of the lines used on maps to indicate water or mountains or towns or latitude and longitude, and the like. The school devotes

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*In Massachusetts, for example, there were in 1850, 3,351 arrests for drunkenness, while in 1885, the number had increased to 18,701. But meanwhile the crimes against person and property had decreased from 1860 to 1885 forty-four per cent, making allowance for increase of population. Life and property had become more safe, but drunkenness had become less safe.*

itself to instructing the pupil on these dry details of arts that are used to record systematic knowledge. These conventionalities once learned, the youth has acquired the art of self-help; he can of his own effort open the door and enter the treasure-house of literature and science. Whatever his fellow-men have done and recorded he can now learn by sufficient diligence of his own.

The difference between the part of education acquired in the family and that acquired in the school is immense and incalculable. The family arts and trades, manners and customs, habits and beliefs, form a sort of close-fitting spiritual vesture: a garment of the soul always worn, and expressive of the native character not so much of the individual as of his tribe or family or community. The individual has from his birth been shaped into these things as by a mould; all his thinking and willing and feeling have been moulded into the form or type of humanity looked upon as the ideal by his parents and acquaintances.

This close-fitting garment of habit gives him direction but not self-direction or freedom. He does what he does blindly, from the habit of following custom and doing as others do.

But the school gives a different sort of training,—its discipline is for the freedom of the individual. The education of the family is in use and wont and it trains rather than instructs. The result is unconscious habit and ungrounded prejudice or inclination. Its likes and dislikes are not grounded in reason, being unconscious results of early training. But the school lays all its stress on producing a consciousness of the grounds and reasons of things. I should not say all its stress; for the school does in fact lay much stress on what is called discipline,—on habits of alert and critical attention, on regularity and punctuality, and self-control and politeness. But the mere mention of these elements of discipline shows that they, too, are of a higher order than the habits of the family, inasmuch as they all require the exertion of both will and intellect consciously in order to attain them. The discipline of the school forms

a sort of conscious superstructure to the unconscious basis of habits which have been acquired in the family.

School instruction, on the other hand, is given to the acquirement of techniques; the technique of reading and writing, of mathematics, of grammar, of geography, history, literature, and science in general.

One is astonished when he reflects upon it at first, to see how much is meant by this word technique. All products of human reflection are defined and preserved by words used in a technical sense. The words are taken out of their colloquial sense, which is a loose one except when employed as slang. For slang is a spontaneous effort in popular speech to form technical terms.

The technical or conventional use of signs and symbols enables us to write words and record mathematical calculations; the technical use of words enables us to express clearly and definitely the ideas and relations of all science. Outside of technique all is vague hearsay. The fancy pours into the words it hears such meanings as its feelings prompt. Instead of science there is superstition.

The school deals with technique in this broad sense of the word. The mastery of the technique of reading, writing, geography and history lifts the pupil into a plane of freedom hitherto not known to him. He can now by his own effort master for himself the wisdom of the race.

By the aid of such instruments as the family education has given him he cannot master the wisdom of the race, but only pick up a few of its results, such as the custom of his community preserves. By the process of hearsay and oral inquiry it would take the individual a lifetime to acquire what he can get in six months by the aid of the instruments which the school places in his hands. For the school gives the youth the tools of thought.

Immigrants to America in the colonial period laid stress on the establishment of schools. The ideas of Luther were echoed by reformers in Holland, Sweden, Switzerland and elsewhere. Education is called "the foundation

of the commonwealth," in 1853, in a school law of Holland. At that time there was a stringent school law passed. In Sweden education was common before 1650, and every peasant's child was taught to read.

Boston, in 1635, voted a school and funds to support a master. Roxbury was quite active in the founding of free schools. Plymouth, Weymouth, Dorchester, Salem, Cambridge, and other towns had schools before 1650. A law of the general court of Massachusetts decreed that in every town the selectmen should prosecute those who refused to "train their children in learning and labor," and to impose a fine of 20 shillings on those who neglected to teach their children "so much learning as may enable them perfectly to read the English tongue."

Schools were established in the Connecticut colonies immediately after their settlement. The Rhode Island colonies had schools by 1650. In 1636 occurred the important vote of the general court of Massachusetts, setting apart four hundred pounds for the establishment of a college which was endowed two years afterward by John Harvard, receiving 1700 pounds and named from its benefactor. The public Latin school of Boston dates from 1635. Meanwhile in New York the Dutch had brought over their zeal for education. The Dutch West India company, in 1621, charged its colonists to maintain a clergyman and a schoolmaster. It seems that in 1625 the colonial estimate included a clergyman at 1440 florins, and a schoolmaster at 360 florins. In 1633 the first schoolmaster arrived—Adam Roelandson. His name is revered like that of Ezekiel Cheever and Philomon Purmont, schoolmasters of early Boston.

As regards common schools in Virginia, the opinion of the royal governor, Berkeley, is often quoted: "*I thank God there be no free schools nor printing-presses, and I hope we shall not have them these hundred years; for learning has brought disobedience and heresy and sects into the world, and printing has divulged them and libels against the best*

of governments: God keep us from both." The governor of the Connecticut colony answered to a question (apparently of the commissioners of foreign plantations): "One-fourth of the annual revenue of this colony is laid out in maintaining free schools for the education of our children."

A propos to this utterance of Berkeley, against whom the more progressive spirit of Virginia arose in rebellion in 1676, there should be quoted a more noteworthy sentence from the Virginian, Thomas Jefferson, who wrote (to J. C. Cabell) in 1818: "A system of general instruction which shall reach every description of our citizens from the richest to the poorest, as it was my earliest, so shall it be the latest of all the public concerns in which I shall permit myself to take an interest."

In 1647 the Massachusetts general court passed what has become the most celebrated of the early school laws of the colonies. In it occurs the often-quoted passage: "To the end that learning may not be buried in the graves of our forefathers, \* \* \* it is ordered that every township within this jurisdiction \* \* \* of the number of fifty households shall appoint one within their town to teach all such children as shall resort to him to write and read, whose wages shall be paid either by the parents or masters of such children, or by the inhabitants in general \* \* \* further ordered that any town \* \* \* of one hundred \* \* \* householders \* \* \* shall set up a grammar school, the master thereof being able to instruct youths so far as they may be fitted for the university." This law attached a penalty to its violation. "Grammar" meant Latin grammar at that period.

New Jersey established schools as early as 1683, and an example of a permanent school fund is found in an appropriation made that year. In 1693 a law compelled citizens to pay their shares for the maintenance of a school. In 1726 a clergyman from Pennsylvania established in New Jersey a classical school that grew in after times into Princeton college.

The original charter given William Penn required that the government of his colony should erect and aid public schools. Within 20 years after its settlement, schools were founded in Philadelphia, and others in towns of that colony.

The management of the district (elementary) schools began in most cases with the church and gradually came into the hands of the smallest political subdivision, known as "districts." Each township was divided into districts for school purposes, and for minor political purposes such as repair of the public highways. Each district contained an average of four square miles, with a schoolhouse near the center of population, usually a little distance from some village, and holding a maximum of forty or fifty pupils. The school committee employed teachers. The schools held a three months' session in the winter, and sometimes this was made four months. The winter school was nearly always "kept" by a man. There might be a summer school for a brief session kept by a woman. Wages for the winter school, even as late as 1840, in the rural districts of New England, were six to ten dollars a month. The schoolmaster might be a young college student trying to earn money during his vacation to continue his course in college. More commonly he was a surveyor, or clerk, or a farmer who had a slender store of learning but who could "keep order." He possessed the faculty to keep down the boisterous or rebellious pupils and could hear the pupils recite their lessons memorized by them from the book.

There were in some places school societies, semi-public corporations, that founded and managed the schools, receiving more or less aid from the public funds. Such associations provided much of the education in New York, Philadelphia, and in many parts of New England before the advent of the public school.

When the villages began to catch the urban spirit and establish graded schools with a full annual session, there came a demand for a higher order of teacher, the professional teacher, in short. This caused a comparison of ideals ;

the best enlightened in the community began an agitation of the school question, and supervision was demanded. In Massachusetts, where the urban civilization had made most progress, this agitation resulted in the formation of a state board of education in 1837, and the employment of Horace Mann as its secretary (June, 1837). Boston had been connected with Providence, Worcester and Lowell by railroads before 1835, and in 1842 the first great trunk railroad had been completed through Springfield to Albany, opening to Boston a communication with the great west by the Erie canal and the newly completed railroad from Albany to Buffalo. This was the beginning of the great urban epoch in America that has gone on increasing the power of the city to this day.

The number of cities containing 8,000 inhabitants and upwards, was, in 1790, only six; between 1800 and 1810 it had increased to 11; in 1820 to 13; in 1830, 26; in 1840, 44; in the fifty years between 1840 and 1890 it increased from 44 to 443, or 10 times the former number. The urban population of the country in 1790 was, according to the superintendent of the census (see Bulletin No. 52, April 17, 1791), only one in 30 of the population; in 1840 it had increased to one in 12; in 1890, to one in three. In fact, if we count the towns on the railroads that are made urban by their close connection with the large cities, and the suburban districts, it is safe to say that now one-half of the population is urban.

Horace Mann came to the head of education in Massachusetts just at the beginning of the epoch of railroads and the growth of cities. He attacked with unsparing severity the evils of the schools as they had been. The school district system, introduced into Connecticut in 1701, into Rhode Island about 1750, and into Massachusetts in 1789, was pronounced by him to be the most disastrous feature in the whole history of educational legislation in Massachusetts.

Horace Mann extended his criticisms and suggestions to the examination of teachers and their instruction in teachers'

institutes; to the improvement of school buildings; the raising of school funds by taxation; the creating of a correct public opinion on school questions; the care for vicious youth in appropriate schools. He discarded the hide-bound text-book method of teaching and substituted the oral discussion of the topic in place of the memorizing of the words of the book. He encouraged school libraries and school apparatus.

Horace Mann's influence founded the first normal school in the United States at Lexington (afterwards moved to Framingham), and a second one founded at Bridgewater in the fall of the same year (1839).

Inspired by the example in Massachusetts, Connecticut was aroused by Henry Barnard, who carried through the legislature the act organizing a state board of commissioners, and became himself the first secretary of it (1839). In 1849, Connecticut established a normal school. In 1843, Mr. Barnard went to Rhode Island and assisted in drawing up the state school law under which he became the first commissioner, and labored there six years.

These were the chief fermenting influences in education that worked a wide change in the management of schools in the middle and western states within the past fifty years.

Superintendents of city school systems began in 1837 with Buffalo. Providence followed in 1839; New Orleans in 1841; Cleveland in 1844; Baltimore in 1849; Cincinnati in 1850; Boston in 1851; New York, San Francisco and Jersey City in 1852; Newark and Brooklyn in 1853; Chicago and St. Louis in 1854; and finally Philadelphia in 1883.

State superintendents began with New York, 1813; New York was followed by 16 of the states before 1850. From 1851 to the civil war, eight states established the office of state superintendent; since then, nineteen other states, including 10 in the south, that had no state systems of education previously.

Normal schools in the United States increased from one, beginning in 1839 in Massachusetts, to 138 public and 46



private normal schools in 1889, with an attendance of upwards of 28,000 students preparing for the work of teaching. This would give a total of some twelve thousand a year of new teachers to meet the demand. It may be assumed, therefore, that less than one-sixth of the supply of new teachers comes from the training schools specially designed to educate teachers.

The history of education since the time of Horace Mann is very largely an account of the successive modifications introduced into elementary schools through the direct or indirect influence of the normal school.





APPENDIX II — *Number of pupils enrolled in the common schools at various periods and the relation of the enrollment to the school population*

STATE OR TERRITORY	Number of different pupils enrolled during the school year (excluding duplicate enrollments)					Per cent of school population (i. e., of children 5 to 18 years of age) enrolled				
	1870-71	1879-80	1880-90	1897-98		1870-71	1879-80	1880-90	1897-98	
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>		<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	
<b>UNITED STATES</b>										
<i>North Atlantic Division</i>										
Maine.....	7 561 582	9 867 595	12 722 581	15 038 636		61.45	65.50	68.61	70.08	
North Atlantic Division.....	2 743 344	2 930 345	3 112 622	3 614 463		77.05	75.17	70.45	70.38	
South Atlantic Division.....	603 610	1 242 811	1 785 486	2 134 725		30.51	50.74	59.22	63.63	
South Central Division.....	767 830	1 371 975	2 203 570	2 875 366		34.17	45.43	60.14	64.41	
North Central Division.....	3 300 660	4 033 858	5 015 217	5 660 572		76.87	75.84	76.46	73.35	
Western Division.....	146 120	288 546	515 977	744 510		54.77	64.96	70.01	70.73	
<i>South Atlantic Division</i>										
Maine.....	a 152 600	149 827	130 676	134 405		a 87.35	89.80	85.88	83.35	
New Hampshire.....	71 957	64 341	50 813	b 64 207		91.31	81.32	71.28	b 73.25	
Vermont.....	c 65 384	75 238	c 65 608	65 534		.....	87.21	.....	70.53	
Massachusetts.....	272 661	306 777	371 492	450 141		72.34	71.76	72.56	74.03	
Rhode Island.....	a 34 000	40 604	52 774	65 384		a 59.24	59.59	62.65	64.33	
Connecticut.....	133 588	119 694	120 595	147 833		86.83	76.97	72.02	72.72	
New York.....	1 038 110	1 031 593	1 042 160	b 1 203 109		82.08	77.10	70.71	b 71.48	
New Jersey.....	169 430	204 961	234 972	304 680		63.20	64.77	62.21	65.29	
Pennsylvania.....	834 614	937 310	1 020 522	1 173 082		76.35	74.37	69.53	67.83	
<i>South Atlantic Division</i>										
Delaware.....	20 058	27 823	31 434	d 33 174		50.04	65.20	66.19	d 67.93	
Maryland.....	115 683	162 431	184 251	236 003		46.70	58.13	60.37	67.16	
District of Columbia.....	15 157	26 439	36 906	44 608		41.60	55.40	63.10	61.71	
Virginia.....	131 088	220 736	342 269	b 367 817		32.34	45.00	63.19	61.71	
West Virginia.....	76 999	142 850	193 064	236 188		49.47	60.21	75.27	81.10	
North Carolina.....	a 115 000	252 612	322 533	399 375		a 31.23	55.87	56.39	60.41	
South Carolina.....	66 056	134 072	201 260	b 258 183		27.28	40.56	47.08	b 54.55	
Georgia.....	49 578	236 533	381 207	450 832		11.89	46.24	58.45	60.54	
Florida.....	14 000	39 315	92 472	108 455		21.21	44.16	71.10	63.37	
<i>South Central Division</i>										
Kentucky.....	e 178 457	e 276 000	390 660	b 501 803		.....	.....	65.64	b 76.00	
Tennessee.....	a 140 000	300 217	447 950	f 481 585		a 32.00	58.21	74.05	f 71.97	
Alabama.....	141 312	179 490	301 615	b 348 899		a 40.36	42.06	55.83	56.13	

North Central Division									
Mississippi ppi.	117 000	236 654	334 158	6 367 579	40 60	61 29	70 62	6 69 17	
Louisiana	57 639	77 642	120 253	182 341	24 78	25 87	31 58	39 76	
Texas	63 964	220 000	476 872	6 612 140	21 60	42 40	59 30	6 61 84	
Arkansas	69 027	81 972	223 071	303 808	40 29	30 81	55 41	68 75	
Oklahoma				77 121				78 96	
Ohio									
Indiana	719 372	729 499	707 439	810 285	84 04	76 69	76 54	72 92	
Illinois	459 057	511 283	578 955	560 157	78 64	82 39	79 21	84 82	
Michigan	672 087	704 041	778 359	939 103	81 01	74 61	71 97	66 25	
Wisconsin	262 460	304 536	427 032	496 025	79 66	76 08	73 45	79 25	
Minnesota	205 485	299 457	381 723	435 914	73 02	73 78	69 77	69 25	
Iowa	113 983	180 448	286 960	384 663	75 92	75 87	74 59	75 18	
Missouri	341 938	426 057	493 267	548 852	84 44	83 52	85 51	86 62	
Nebraska	330 070	432 986	620 314	688 883	56 03	68 85	74 43	72 30	
North Dakota		13 718	35 543	67 375	39 26	41 68	71 26	70 95	
South Dakota		92 549	78 043	89 001	58 79	68 48	81 04	77 98	
Nebraska	23 265	92 549	240 300	273 914	58 79	68 48	75 35	77 97	
Kansas	89 777	234 434	399 322	370 240	74 22	73 23	88 56	88 20	
Western Division									
Montana	1 657	4 270	16 980	35 970	70 24	63 77	71 14	78 04	
Wyoming	4 450	2 907	7 032	13 042	45 34	77 44	54 46	54 46	
Colorado	4 357	22 110	65 490	104 733	42 28	60 82	72 20	81 38	
New Mexico	1 320	4 755	18 215	26 484	44 42	43 32	42 25	51 09	
Arizona		4 212	7 969	14 613		53 16	52 72	66 09	
Utah	16 992	24 326	37 270	70 878	53 36	59 61	55 46	82 45	
Nevada	3 106	9 045	7 387	7 348	50 97	79 73	53 80	81 48	
Idaho	906	5 834	14 311	20 737	46 66	77 85	63 66	69 88	
Washington	45 000	14 780	55 064	97 916	66 00	72 36	70 58	91 42	
Oregon	21 000	37 533	63 254	85 230	67 73	75 02	74 78	84 64	
California	91 332	158 765	221 756	259 459	63 63	73 37	77 38	73 17	

*a* Approximately  
*b* In 1896-97

*c* Pupils of legal age only  
*d* In 1891-92

*e* Highest number enrolled  
*f* In 1895-96

APPENDIX III — *Common school statistics of the United States*

	1870-71	1879-80	1889-90	1897-98 <i>a</i>
<b>I — General statistics</b>				
Total population.....	39 500 500	50 155 783	62 622 250	72 737 100
Number of persons 5 to 18 years of age.....	12 305 600	15 065 767	18 543 201	21 458 294
Number of different pupils enrolled on the school registers.....	7 561 582	9 867 595	12 722 581	15 038 636
Per cent of total population enrolled.....	19.14	19.67	20.32	20.68
Per cent of persons 5 to 18 years of age enrolled.....	61.45	65.50	68.61	70.08
Average daily attendance.....	4 545 317	6 144 143	8 153 635	10 286 092
Ratio of same to enrollment.....	60.1	62.3	64.1	68.4
Average length of school term (days).....	132.1	130.3	134.7	143.1
Aggregate number of days attended.....	600 432 802	800 710 970	1 098 232 725	1 471 435 367
Average number for each person 5 to 18 years of age.....	48.7	53.1	59.2	68.6
Average number for each pupil enrolled....	79.4	81.1	86.3	97.8
Male teachers.....	90 293	122 795	125 525	131 750
Female teachers.....	129 932	163 798	238 397	277 443
Whole number of teachers.....	220 225	286 593	363 922	409 193
Per cent of male teachers.....	41.0	42.8	34.5	32.2
Average monthly wages of teachers:				
Males.....				<i>b</i> \$45 16
Females.....				<i>b</i> \$38 74
Number of schoolhouses.....	132 110	178 222	224 526	242 390
Value of school property.....	\$143 818 703	\$20 9571 718	\$342 531 791	\$492 703 781
<b>II — Financial statistics</b>				
Receipts:				
Income from permanent funds.....			\$7 744 765	\$9 213 323
From state taxes.....			26 345 323	35 600 643
From local taxes.....			97 222 426	134 104 053
From all other sources.....			11 882 292	20 399 578
Total receipts.....			\$143 194 806	\$199 317 597
Per cent of total derived from—				
Permanent funds.....			5.4	4.6
State taxes.....			18.4	17.9
Local taxes.....			67.9	67.3
All other sources.....			8.3	10.2
Expenditures:				
For sites, buildings, furniture, libraries, and apparatus.....			\$26 207 041	\$32 814 532
For salaries of teachers and superintendents.....	\$42 580 853	\$55 942 972	91 836 484	123 809 412
For all other purposes.....			22 463 190	37 396 526
Total expenditures.....	\$69 107 612	\$78 094 687	\$140 506 715	\$194 020 470
Expenditure per capita of population.....	1.75	1.56	2.24	2.67
Expenditure per pupil (of average attendance):				
For sites, buildings, etc.....			\$3.21	\$3.19
For salaries.....	\$9.37	\$9.10	11.26	12.04
For all other purposes.....			2.76	3.63
Total expenditure per pupil.....	\$15.20	\$12.71	\$17.23	\$18.86
Per cent of total expenditure devoted to—				
Sites, buildings, etc.....			18.6	16.9
Salaries.....	61.6	71.6	65.4	63.8
All other purposes.....			16.0	19.3
Average expenditure per day for each pupil (in cents):				
For tuition.....	7.1	7.0	8.4	8.4
For all purposes.....	11.5	9.7	12.8	13.2

*a* The figures for 1897-98 are approximate.*b* In 44 states.

STATE OR TERRITORY	Pupils enrolled	Average number of pupils attending school each day	Average number of days the schools were kept during the year	TEACHERS			Estimated value of all school property	Total expenditure during 1897-98
				Male	Female	Total		
UNITED STATES.....								
North Atlantic Division.....								
Maine.....	134 495	97 616	137.	1 257	5 470	6 727	4 225 401	1 614 330
New Hampshire.....	64 207	47 717	134.6	202	2 509	2 711	3 284 121	1 040 309
Vermont.....	65 532	48 060	154.	389	2 397	2 786	1 884 000	933 424
Massachusetts.....	456 141	349 147	186.	1 174	12 029	13 203	39 077 405	13 653 640
Rhode Island.....	65 384	47 370	191.	103	1 050	1 152	4 579 334	1 717 462
Connecticut.....	147 833	105 002	188.8	373	3 943	3 943	9 879 022	2 686 871
New York.....	1 203 199	827 652	176.	5 401	28 024	34 385	71 632 811	28 568 871
New Jersey.....	304 680	200 278	185.	834	5 442	6 276	14 661 840	5 723 424
Pennsylvania.....	1 173 082	864 626	159.4	9 348	18 732	28 080	48 917 003	19 044 461
South Atlantic Division.....								
Delaware.....	33 174	22 693	160.	218	622	840	904 426	275 000
Maryland.....	236 003	134 539	182.	1 144	3 843	4 987	4 500 000	2 709 104
District of Columbia.....	44 668	34 383	185.	148	959	1 107	3 750 000	1 251 035
Virginia.....	367 817	213 421	120.2	3 033	5 562	8 575	3 090 777	1 827 033
West Virginia.....	236 188	159 768	111.	4 006	2 712	6 868	3 471 607	2 046 623
North Carolina.....	390 375	214 540	68.8	3 695	3 322	7 217	970 675	931 133
South Carolina.....	268 183	162 559	83.2	2 245	2 728	4 973	845 596	607 068
Georgia.....	450 832	278 715	116.9	4 510	4 686	9 595	3 977 070	1 758 106
Florida.....	108 455	74 004	104.	1 121	1 671	2 792	755 824	668 242
South Central Division.....								
Kentucky.....	501 893	308 697	115.4	4 090	5 951	9 060	5 448 814	2 650 100
Tennessee.....	481 885	338 176	90.2	5 121	4 014	9 135	3 133 780	1 600 750
Alabama.....	348 897	222 690	80.1	4 741	2 778	7 510	1 500 000	800 273
Mississippi.....	507 574	223 900	101.6	3 649	4 254	7 903	1 636 055	1 165 840
Louisiana.....	182 341	132 640	106.3	1 302	2 472	3 834	1 066 000	956 888

## APPENDIX IV — Statistics of state common school systems, 1897-98—Continued

STATE OR TERRITORY	Pupils enrolled	Average number of pupils attending school each day	Average number of days the schools were kept during the year	TEACHERS			Estimated value of all school property	Total expenditure during 1897-98
				Male		Total		
				Male	Female			
North Central Division								
Texas.....	612 140	404 372	106.	6 170	6 774	12 953	6 081 356	4 320 271
Arkansas.....	303 868	191 447	69.	4 515	2 558	7 073	2 294 307	1 220 362
Oklahoma.....	77 121	49 182	86.3	841	1 266	2 107	600 000	415 347
Indian Territory.....	.....	.....	.....	.....	.....	.....	.....	.....
North Central Division								
Ohio.....	810 285	618 667	162.	10 358	14 808	25 256	41 428 280	12 563 040
Indiana.....	566 157	432 931	144.	7 107	8 026	15 223	21 536 212	7 816 139
Illinois.....	939 163	720 227	158.7	6 718	18 549	25 267	43 705 043	16 468 055
Michigan.....	406 025	347 714	160.8	3 625	12 048	15 673	48 138 569	6 281 003
Wisconsin.....	435 014	287 000	160.	2 654	9 811	12 465	14 800 000	5 332 003
Minnesota.....	384 063	243 200	156.	2 304	8 959	11 245	14 559 564	4 893 078
Iowa.....	548 852	370 845	162.	5 855	22 859	28 634	17 450 534	8 451 504
Missouri.....	688 983	440 692	141.7	5 951	9 315	15 266	10 718 410	6 248 961
North Dakota.....	67 375	41 155	122.	1 115	2 522	3 637	2 132 738	1 288 031
South Dakota.....	89 001	54 600	138.4	1 321	3 187	4 508	2 920 744	1 280 663
Nebraska.....	273 914	173 030	131.	2 433	7 175	9 608	8 943 024	3 712 017
Kansas.....	370 240	256 932	124.3	5 380	7 133	12 513	9 504 961	3 991 477
Western Division								
Montana.....	35 070	23 400	140.2	201	885	1 086	1 837 964	776 150
Wyoming.....	13 042	8 700	110.	102	434	536	441 460	213 201
Colorado.....	104 733	69 973	159.7	744	2 238	2 982	5 087 703	2 341 311
New Mexico.....	26 484	16 950	96.6	333	270	603	281 000	154 532
Arizona.....	14 613	9 011	130.	156	279	435	472 108	220 323
Utah.....	70 878	49 638	157.	502	837	1 339	2 652 595	1 047 174
Nevada.....	7 348	4 982	154.	40	274	314	265 011	203 642
Idaho.....	29 737	21 528	100.	324	848	1 172	507 718	274 377
Washington.....	97 916	64 102	148.0	1 033	2 288	3 321	4 977 679	1 795 795
Oregon.....	85 230	62 799	123.9	1 250	2 443	3 693	3 748 154	1 271 937
California.....	259 459	185 424	172.4	1 407	6 035	7 432	17 349 468	6 266 470



APPENDIX V — *Corporal punishment*

In one state, New Jersey, the teacher is forbidden by law to inflict corporal punishment. No other state goes to this length, but Illinois, Kansas, Mississippi, Montana, Pennsylvania, South Dakota, Washington, and West Virginia specifically prescribe a penalty for excess amounting to cruelty. Legal punishment would be meted out to a brutal teacher in the other states just as surely as in these, but resort would be had to the common law and not to a statute. Only in Arizona is there formal statutory authority for corporal punishment, but whipping has been the common mode of discipline in school from time immemorial; custom legalizes it, and unless forbidden in express terms the teacher does not need the authority of a special permissive law. Judicial decisions to this effect have been made in Alabama, Arkansas, Connecticut, Indiana, Iowa, Maine, Minnesota, North Carolina, Pennsylvania, Wisconsin, and probably in other states.

Local school boards have always the implied power to make regulations for the order and discipline of their respective schools, and three states, viz., Michigan, New York, and Pennsylvania, expressly grant them this power. Acting under this power, expressed or implied, several cities, notably New York city, Chicago, and Albany, have prohibited absolutely the use of the rod. The same is true of Providence, Rhode Island, except in the primary grades, and in them whipping must not be inflicted unless the written consent of the parent or guardian has been previously filed with the city superintendent.

Corporal punishment may be used as a last resort and under rigid regulations as to reports, etc., in a great many cities, among them being Baltimore, Detroit, Indianapolis, Louisville, Minneapolis, New Orleans, Pittsburg, Rochester, St. Louis, San Francisco, Worcester, and Philadelphia.

APPENDIX VI—*Teachers' pensions, and benefit associations*

Voluntary mutual benefit associations for temporary aid only exist in Baltimore, St. Louis, Cincinnati, Cleveland, Detroit, Chicago, Buffalo, San Francisco, St. Paul, and one interstate. These have from one to two dollars initiation fee, one to five dollars annual dues. Special assessments of one dollar each are made in some cases. Benefits in sickness range from fifty cents a day to ten dollars a week; at death funeral expenses only are paid in some instances, and in others a sum equal to one dollar from each member of the association.

Associations for annuity or retirement fund only are in New York city, Boston, and Baltimore, and there is an annuity guild in Massachusetts. The initiation fees reported are three to five dollars; the annual dues one to one and a half per cent of salary up to eighteen or twenty dollars. The annuity is from 60 per cent of salary to \$600 a year. Time of service required for retirement, from 2 to 5 years with disability, from 35 to 40 years without disability.

Associations for both temporary aid and annuity exist in Hamilton county (Cincinnati), Ohio; Philadelphia, Brooklyn, and District of Columbia. Initiation fees, one to ten dollars; annual dues, five to forty dollars; annuity, five dollars per week to \$600 a year, and \$100 for funeral expenses in case of death; temporary aid during illness, five or six dollars per week; minimum service for retirement—with disability, 3 to 5 years; without disability, 35 to 40 years.

Pension or retirement funds are authorized by state legislation for St. Louis, all cities in California, Brooklyn, New York, Detroit, Chicago, New York city, all cities in New Jersey, Cincinnati, and Buffalo. Dues, one per cent of salary; annuity, \$250 to one-half of salary; minimum, \$300, to \$1,200 maximum; minimum service—with disability, 20 to 35 years; without disability, 25 to 35 years.

APPENDIX VII — *United States railroad mileage ; census years 1830-90*

	1890	1880	1870	1860	1850	1840	1830
Miles of line.....	163 562.12	87 724.08	49 168.33	28 919.79	18 571.48	2 755.18	39.80
Miles per 10,000 population..	26.12	17.49	12.75	9.20	3.71	1.61	.03

APPENDIX VIII — *Text-books ; selection and supply.*

In a few states text-books do not form a specific subject of legislation, but local boards have control under the general charge of the welfare of the schools.

In most states legislation regulates the selection of text-books.

In some states a guaranty is required from publishers to supply books, according to samples, at wholesale, retail, introduction, exchange, mail prices, part or all, for a term of years.

In fewer states the school boards buy and sell the books on public account. In certain states boards continue to own the books used free by pupils. Indigent pupils are more frequently supplied at public expense.

In most states special or general laws give cities the control of the details of their school administration, including text-books.

Specific penalties are expressed in certain cases for using other than prescribed books, but in general such use would be only a violation of law, to be dealt with as it occurred.

State superintendent is here used to indicate the chief officer of the state schools.

In the states immediately following, individuals, except indigents, buy their books :

*Arizona.*—The lists are fixed for 4 years by territorial board.

*Arkansas.*—The list is fixed for 3 years, with exceptions, by local board, from books recommended by state superintendent.

*California.*—The state prepares, publishes, and sells books for primary and grammar schools, but high schools supported wholly by local effort are almost free of the law. Penalty for using other than the state list, forfeiture of one-fourth the apportionment from state funds. Indigent pupils are furnished free.

*Georgia.*—County board fixes list. Unchanged within 5 years except by a three-fourths vote of the full board. Penalty, teacher cannot receive pay from pupils using other books.

*Indiana*.—A state board selects books under publishers' guaranty. County boards may fix a list of additional books for high schools for 6 years. Books are bought and sold by, or subject to, arrangement of local board, and become private property. Districts supply indigents.

*Illinois*.—District board fixes list for 4 years. Indigents supplied free.

*Kentucky*.—County board of examiners fixes list for 5 years, with publishers' guaranty. The county judge furnishes indigents.

*Louisiana*.—State board fixes list for 4 years, with limited local discretion.

*Mississippi*.—The county school board adopts a series of books for 5 years on publishers' guaranty. Penalty, pupils without the prescribed books in any branch are not to receive instruction in that branch.

*Missouri*.—A state school-book commission fixed a list, with publishers' guaranty, for 5 years from September 1, 1897, to be handled through dealers. Indigents are supplied from local contingent funds.

*Nevada*.—State board fixes list for 4 years. Penalty, forfeiture of apportionment. District furnishes indigents.

*New Mexico*.—The territorial board of education is authorized to fix a list for 4 years and to contract with publishers and sell to counties. Districts furnish indigents.

*North Carolina*.—County board fixes list for 3 years, with publishers' guaranty.

*Ohio*.—A state commission fixes a list on publishers' guaranty, from which local boards fix lists for 5 years (with exception). Boards may buy and sell to pupils or arrange with dealers to supply them. Indigents are furnished.

*Oklahoma*.—Territorial superintendent fixes a list for 5 years on publishers' guaranty.

*Oregon*.—State board fixes a list for 6 years on publishers' guaranty.

*South Carolina*.—State board fixes a list for 5 years on publishers' guaranty, and may require publishers to have depositaries in each county, or county boards may furnish books at cost.

*Tennessee*.—County superintendent suggests suitable books.

*Texas*.—The law resembles that of Missouri. Penalty, upon any teacher or trustee, \$10 to \$50 for each offense. Every day of violation of law to be considered a separate offense.

*Virginia.*—Two books of John Esten Cooke — *Virginia, a History of Her People*; *Stories of the Old Dominion* — are prescribed by law. State board fixes a list.

*West Virginia.*—A contract list for 5 years is part of the law of 1896, with exceptions. County school book boards are established by act of 1897. Publishers keep books with local depositaries on account of district building fund. Penalty, on every officer or teacher, \$3 to \$10 for each offense.

*Wyoming.*—A convention of superintendents fixes a list for 5 years.

The states following, regularly or through stated action, authorize provision for free use of books by pupils:

*Colorado.*—District boards fix list for 4 years, with exceptions. Indigents are furnished and, on popular vote, all pupils, free.

*Connecticut.*—State board may fix list for 5 years. Town boards may take additional action and, on popular vote, furnish free text-books.

*Delaware.*—State board fixes list; district board furnishes free text-books.

*Idaho.*—Books adopted by a state board of text-book commissioners for all common, graded, and high schools are furnished free by the district; under contracts with publishers for 6 years.

*Iowa.*—Local boards may buy and sell to pupils at cost. County uniformity can be fixed for 5 years. Text-books are furnished free to indigents, and, on popular vote, to all, by the district.

*Kansas.*—A school text-book commission (1897) has selected text-books in common-school studies for five years and contracted with publishers to furnish them to pupils through agencies at every county seat. On popular vote, with a two-thirds majority, school boards may purchase books and furnish their use free to pupils. Penalty for using other text-books, except for reference, \$25 to \$100, with or without imprisonment.

*Maine, New Hampshire, Massachusetts, Rhode Island* (towns), *New Jersey, Pennsylvania* (local boards), *Maryland* (counties), furnish free text-books.

*Michigan.*—District boards furnish books to indigents, and, on popular vote, to all pupils, free.

*Minnesota.*—Local boards may fix a list for 3 to 5 years, with publishers' guaranty, and may purchase and provide for loan free or for sale at cost to pupils.

*Montana.*—A state board of text-book commissioners fixed a list for 6 years to be handled through dealers, with publishers' guaranty. Upon vote of a district, free text-books are furnished.

*Nebraska.*—Local boards furnish books free; may fix list with publishers' guaranty not beyond 5 years. A local dealer may be designated to handle the books on agreed terms.

*New York.*—Every union free school board is "to prescribe the text-books \* \* \* and to furnish the same out of any money provided for the purpose."

Common-school districts, by popular vote, may furnish indigent pupils.

*North Dakota.*—Local boards may furnish free text-books, and must on popular vote. Contracts must be for 3 to 4 years without change.

*South Dakota.*—A county board of education is required to adopt a uniform series for 5 years, to be furnished through designated depositories under publishers' guaranty. On petition of a majority of electors, a school corporation must arrange for free text-books.

*Utah.*—A convention of superintendents fixes a list, except for cities, for 5 years, on publishers' guaranty. Penalty, on teacher, loss of eligibility. Boards of education are authorized to furnish free text-books, and, in cities, to select books.

*Vermont.*—County authority fixes a list for 5 years on publishers' guaranty. On popular vote, local boards furnish free text-books.

*Washington.*—The state board of education fixes a list for 5 years on publishers' guaranty. Penalty, on district, forfeiture of one-fourth the apportionment. Local boards furnish indigents, and, on popular vote, all pupils.

*Wisconsin.*—District board fixes list for 3 years. Penalty on every member of the board, \$50. On popular vote, books are furnished free without time limitation as to change.

APPENDIX IX—*Average total amount of schooling (expressed in years of 200 school days each) each individual of the population would receive as his equipment for life, under the conditions existing at the different dates given in the table, and counting in the work done by all grades of both public and private schools and colleges*

	1870	1880	1890	1891	1892	1893	1894	1895	1896	1897	1898
United States.....	3.36	3.96	4.46	4.51	4.49	4.52	4.72	4.75	4.83	4.91	5.01
North Atlantic Division.....	5.06	5.69	6.05	6.15	6.18	6.10	6.35	6.47	6.52	6.64	6.76
South Atlantic Division.....	1.23	2.22	2.73	2.78	2.74	2.79	2.95	2.95	2.93	3.05	3.14
South Central Division.....	1.12	1.86	2.42	2.62	2.69	2.64	2.89	2.65	2.70	2.75	2.95
North Central Division.....	4.01	4.65	5.36	5.35	5.21	5.38	5.57	5.69	5.84	5.87	5.87
Western Division.....	3.56	4.17	4.57	4.71	5.07	4.93	5.01	5.43	5.46	5.55	5.77

*Average total amount of schooling per inhabitant, etc., considering only the public elementary and secondary schools, and expressed as before in years of 200 school days each*

	1870	1880	1890	1891	1892	1893	1894	1895	1896	1897	1898
United States.....	2.91	3.45	3.85	3.93	3.97	3.99	4.17	4.23	4.28	4.37	4.46
North Atlantic Division.....	4.43	4.84	4.99	5.06	5.10	5.10	5.28	5.47	5.52	5.61	5.71
South Atlantic Division.....	.80	1.90	2.42	2.46	2.46	2.51	2.70	2.68	2.66	2.78	2.87
South Central Division.....	.80	1.57	2.20	2.31	2.41	2.38	2.59	2.59	2.44	2.49	2.68
North Central Division.....	3.71	4.19	4.67	4.74	4.75	4.84	5.00	5.15	5.21	5.28	5.25
Western Division.....	2.77	3.57	3.98	4.16	4.47	4.39	4.45	4.87	4.95	5.02	5.25

NOTE.—The figures of this table for the years previous to the current year have been revised and differ slightly from those heretofore published.

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